S/N 09/132,157 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Leonard Forbes
Serial No.: 09/132,157
Filed: August 11, 1998
Title: SILICON-GERMANIUM DEVICES FOR CMOS FORMED BY ION IMPLANTATION AND SOLID PHASE EPITAXIAL REGROWTH

Examiner: Mark Prenty
Group Art Unit: 2822
Docket: 303.229US2

9th amdtC 3/24/99 DBm

AMENDMENT AND RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

In response to the Office Action of December 15, 1998, please amend the above identified patent application as follows:

IN THE CLAIMS

Please amend claims 11, 24-28, 30 and 32-33 as provided below.

Sub D17 Q7

11. (Once amended) A semiconductor transistor, comprising:

a silicon substrate;

a gate oxide, coupled to the substrate;

a gate, coupled to the gate oxide;

source/drain regions formed in the substrate on opposite sides of the gate; and

a $Si_{1-x}Ge_x$ channel region, having a germanium molar fraction of x, and formed in the substrate, underneath and adjacent the gate oxide and between the source/drain regions[.];

wherein the $Si_{1-x}Ge_x$ channel region has a channel length less than 7μm.

Sub D27 Q2

24. (Once amended) A semiconductor transistor formed on a silicon substrate, comprising:

a $Si_{1-x}Ge_x$ channel region, having a germanium molar fraction of x, and formed in the substrate, underneath and adjacent a gate oxide and between a source region and a drain region[.];

wherein the $Si_{1-x}Ge_x$ channel region has a channel length less than 7μm.